

IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 25, with the following rewritten paragraph:

To allow the use of the host interface, some equipment ~~are provides~~ is provided with a memory card interface. The memory card is handled in the same manner as ~~that of~~ random access memory (RAM). In other words, when the memory card is used, the interface does not require ~~to be initialized~~ initialization. ~~Besides~~ In addition, a program can be executed on the memory card. However, the memory cards have a problem in that they have low capacity of at most 4 megabytes, and they are not readily available in the market these days.

Please replace the paragraph beginning at page 2, line 8, with the following rewritten paragraph:

Japanese Patent Application Laid Open No. H11-242596 (see Fig. 1) discloses SD cards that can be used instead of the memory cards. The SD cards are attracting attention as portable media like floppy disks (FD). The SD card has a larger capacity per unit size, so that ~~they~~ it is useful for recording and reproducing image data or audio data. If the access to the SD card is restricted to a read-access, a basic input/output system (BIOS) is not required. In addition, only required data can be read out according to the access from a central processing unit (CPU), and therefore, a program can be executed on the SD card without data ~~copying~~ being copied to a random access memory (RAM). If a communication error occurs, a communication speed is automatically reduced step by step to a speed at which no error occurs, then the processing is continued. Thus, it is possible to perform data communications without changing software and hardware.

Please replace the paragraph beginning at page 3, line 6, with the following rewritten paragraph:

An interface circuit capable of allowing transmission of data from a detachable card-type memory, which requires access by sectors, to an electronic device, according to one aspect of the present invention includes a reading unit that reads data for a plurality of sectors from the card-type memory; a buffer that stores the data read and has a capacity to store data for a plurality of sectors; a receiver that receives from the electronic device a read-access for data stored in the buffer; a data checker that decides whether data corresponding to the read-access exists among the data stored in the buffer; and a transmitter that transmits the data from the buffer to the electronic device when the data checker decides that data corresponding to the read-access exists among the data stored in the buffer.

Please replace the paragraph beginning at page 8, line 17, with the following rewritten paragraph:

Fig. 4 is a flowchart of ~~[[of]]~~ procedures for initialization of the card 4 by the SD card interface 14. As the initialization is sequentially operated, it is not ~~[[so]]~~ difficult to operate unless the procedures are executed in the wrong order. However, the problem is occurrence of an error due to cases ~~such that a~~ like the card ~~[[is]]~~ not being inserted into the image forming apparatus ~~and or a card being inserted that is not allowed to use is inserted thereto.~~ If the card is not inserted, its insertion can be continuously confirmed during a predetermined period.

Please replace the paragraph beginning at page 8, line 25, with the following rewritten paragraph:

Occurrence of an error may be suppressed by restricting the purpose of using the initialization for the hardware in the SD card interface 14. In other words, the purpose is restricted to some specific ~~works~~ work by a service engineer such as update of software and execution of a self-diagnostic program.

Please replace the paragraph beginning at page 9, line 5, with the following rewritten paragraph:

The procedures for the initialization of the SD card by the SD card interface are explained with reference to Fig. 4. At first, it is determined whether the card 4 has been initialized (step S401). If the card 4 has not been initialized, reset of SD card interface is released (step S402). It is checked whether the card 4 has been inserted (steps S403, S404), and if the card 4 has been inserted and it is recognized, the process proceeds to step S405. On the other hand, if the card 4 ~~can not~~ cannot be recognized, the process returns to step S401.

Please replace the paragraph beginning at page 10, line 12, with the following rewritten paragraph:

The area size of the user data is obtained by performing acquisition of the card size in the above manner. A nominal size of the card 4 is obtained from the user area size to obtain the offset address (sd_offset). Only the user area is open to the CPU 5 in areas of the SD card. Therefore, an address as a target to be read out is obtained by adding the offset address (sd_offset) to an address (segment address: rd_adr) accessed by the CPU 5. For ~~[[the]]~~ access to the card 4, a sector number (sector_num) to be read out is obtained by the following equation assuming one sector holds, for example, 512 bytes:

$$\text{sector_num}=(\text{rd_adr}+\text{sd_offset})\gg 9.$$

Please replace the paragraph beginning at page 10, line 22, with the following rewritten paragraph:

Fig. 7 is a flowchart of processing when a read-access to the card 4 is made from the CPU 5. This flowchart is based on a case where the card 4 has the buffer 143a holding two sectors. This circuit is also performed by sequential processing. This circuit is not started before the initialization of Fig. 3 is ended. If the card 4 is not recognized when the initialization is ended, then the sequencer is stopped. This operation is one of the restrictions of ~~the purposes~~ purpose as explained above, and therefore, it does not cause any trouble. As shown in Fig. 7, only the read-access to the SD card is described. Therefore, if an access request from the CPU 5 is any request other than the read-access, an access error is returned to the CPU 5.

Please replace the paragraph beginning at page 13, line 6, with the following rewritten paragraph:

Thus, even if the access from the CPU 5 is made across the sectors of the card 4, the data is maintained for a predetermined period, which allows reduction of overhead for data read ~~in execution of~~ to execute a program over the boundary between sectors and ~~in execution of~~ to execute a small size sub-function. Accordingly, the execution speed of the programs can be improved.